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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,946	05/25/2005	William F. Morris	Evionyx-0065USAAON37	1159
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REVEO, INC. 6 Skyline Drive Hawthorne, NY 10523				
EXAMINER				
ENIN-OKUT, EDUE				
ART UNIT		PAPER NUMBER		
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12/24/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/500,946

Applicant(s)

MORRIS ET AL.

Examiner

Edu E. Enin-Okut

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 20-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

ELECTROLYTES, CELLS AND METHODS OF FORMING PASSIVATION LAYERS

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I and Species B, claims 1-12 and 14-19, in the reply filed on November 26, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 20-27 and 37-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on November 26, 2008.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 16-17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 and 17 recite the limitation "the assembled structure". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1795

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 7-8, 11-12 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Badger et al. (US 3,884,724).

Regarding claims 1 and 11, Badger discloses a method of activating a storage battery 10 [electrochemical cell], with a stack 11 of positive and negative plates [dry compartment structure] of the water-activable type in which concentrated acid held in a semi granular form is placed within the battery by the manufacturer and then, at the point of sale is released by the addition of water which combines with the concentrated acid form the battery electrolyte (Abstract; 2:37-41; Fig. 1). The method of this invention utilizes a battery construction in which the stored acid is held in a battery compartment 14 [reservoir of electrolyte concentrate] separated from the plates (Abstract; 2:37-58; Figs. 1, 5).

Regarding claims 2-4, 7-8 and 12, Badger discloses that, when the battery is ready for service, the cap [plug] from the filler opening 19 (made of thermoplastic material such as polypropylene or polyvinyl chloride) is removed, the moisture seal [separator] is punctured or removed, and the operator pours water through the filler tube 17 (and, optionally, a perforate tube 42) [tubing] opening upon the top of the container (4:19-28, 5:8-23; Figs. 1, 7). The water percolates through the concentrate and is withheld from contact with the plates for a time sufficient to form a battery electrolyte having a predetermined minimum concentration or specific gravity (Abstract).

Regarding claims 14-19, Badger discloses a storage battery 10 with a stack 11 of positive and negative plates (2:37-41; Figs. 1, 6). The container 14 for the acid concentrate is dimensioned with a first or vertical portion 15 that fits between the plate stack 11 and wall of the battery cell, and such that its second or horizontal portion 16 will overlie the plate stack 11 between the plate's positive and negative connecting straps 12 and 13 (2:46-53; Figs. 1, 6). One would appreciate that electrode material of the

Art Unit: 1795

storage battery of Enomoto is held within frames forming its positive and negative plates as shown in Fig.

6.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Badger as applied to claims 1-4, 7-8, 11-12 and 14-19, and further in view of Musselman (US 3,437,528).

Regarding claim 5, Badger does not expressly teach that the electrolyte flow control structure comprises a controllable one-way valve.

Musselman teaches a batteries of the deferred action or reserve type with a quick-acting valve for ensuring the rapid release of electrolyte from its container for introduction into the battery compartment when the battery is to be activated (1:10-14, 1:35-42). The valve, held closed by a pin with a lanyard, may be opened by the easy withdrawal of the pin (2:41-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the valve of Musselman in the electrochemical

cell of Badger because Musselman teaches that its use provides is a sure and rapid introduction of electrolyte from a container into a battery compartment.

10. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Badger as applied to claims 1-5, 7-8, 11-12 and 14-19 above, and further in view of Brecht (US 5,543,243).

Regarding claim 6, Badger does not expressly teach that the electrolyte flow control structure comprises of an upside down J-shaped tube.

Brecht teaches a liquid electrolyte battery 10 with a number of electrolytic cells 12. (Abstract). Each electrolytic cell 12 is hydraulically connected at its upper end to the upper end of an adjacent cell by an electrolyte carry-over passage 40 or by an equivalent duct in or in association with the upper boundary of the electrolytic cell within the battery (7:53-57; Figs. 1, 5, 6). Each carry-over passage may comprise an inverted U-shaped tube having substantially parallel legs, an inlet end 42 and an outlet end 44 (7:57-59). In FIG. 1, the carry-over passages 40 are shown having their inlet ends 42 at greater distances below the top of the cells than their outlet ends 44 (Fig. 1). The location of the inlet end 42 from the highest part of the carry-over passage defines the electrolyte level in each electrolytic cell 12 during a leveling operation (8:1-3). Additionally, the length of the outlet end 44 of each carry-over passage is also significant because an air gap or headspace 48 can be maintained between the outlet end and the adjacent transport channel opening which facilitates low pressure replenishing and leveling of the electrolyte in each cell (8:3-13). The reduced liquid and air back pressure associated with the electrolyte replenishment operation translates into reduced pump requirements and simpler and safer acid transport (8:11-20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a J-shaped tube in the electrochemical cell of Badger because Brecht teaches that its use can facilitate the filling of a number of cells with an electrolyte while simplifying and improving the safety of its movement within the cell.

11. Claim 9-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Badger as applied to claims 1-8, 11-12 and 14-19 above, and further in view of Horowitz (US 3,236,695).

Regarding claim 9-10, Badger discloses that, when its battery is ready for service, a cap is removed from a filler opening, a moisture seal is punctured or removed, and an operator pours water through the filler tube in to a compartment holding the battery's positive and negative plates, as discussed above. However, Badger does not expressly teach that the separator is fabricated of nylon.

Horowitz teaches the use of separators in electrochemical devices made of nylon fabrics, felts and sheets so treated are highly suitable for use as spacers or separators because nylon is highly resistant to both alkaline and acidic electrolytes (Title; 4:67-73). It would have been obvious to one of ordinary skill in the art at the time of the invention to form the separator of Badger of nylon because Horowitz teaches that it is highly resistant to alkaline and acidic electrolytes.

Correspondence / Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Edu E. Enin-Okut** whose telephone number is **571-270-3075**. The examiner can normally be reached on Monday - Thursday, 7 a.m. - 3 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

Art Unit: 1795

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/Edu E. Enin-Okut/
Examiner, Art Unit 1795

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1795